225	381/\$.ccis. and midrange and (tweeter wooter)	USPAT;	2003/05/03 23:59
σı	((381/\$.ccls. and midrange and (tweeter woofer) ) and notch) and notch adj filter	USPAT;	2003/05/04 00:00
47	1281/¢ role and midranno and (twooter wooter) ) and notch	US-PGPUB	2003/05/04 01:04
		US-PGPUB	
2289	notch and "band pass"	USPAT;	2003/05/04 01:04
753	(notch and "band pass") and notch same "band pass"	USPAT;	2003/05/04 01:04
508	(notch and "band pass") and notch with "band pass"	USPAT;	2003/05/04 01:05
501	((notch and "band pass") and notch with "band pass") and filter	USPAT;	2003/05/04 01:05
3		US-PGPUB	
293		USPAI; US-PGPUB	2003/05/04 01:06
293	((((notch and "band pass") and notch with "band pass") and filter) and (notch with "band pass")	USPAT;	2003/05/04 01:06
293		US-PGPUB	2003/05/04 01:06
		US-PGPUB	
280	((((notch and "band pass") and notch with "band pass") and filter) and (notch with "band pass")	USPAT;	2003/05/04 01:07
280	((((notch and "band pass") and notch with "band pass") and filter) and (notch with "band pass")	USPAT;	2003/05/04 01:08
269	((((((notch and "band pass") and notch with "band pass") and filter) and (notch with "band pass") near10 filter) and (notch with "band pass") and filter) and (@rlad<=20010822	USPAT; US-PGPUB	2003/05/04 01:11
97	or @ad<=20010822) (////(notch and "band pass") and notch with "band pass") and filter) and (notch with "band	USPAT:	2003/05/04 01:13
	pass") near10 filter) and (notch with "band pass") adj filter) and notch adj filter) and	US-PGPUB	
10	((((((notch and "band pass") and notch with "band pass") and filter) and filte	USPAT;	2003/05/04 01:38
	pass") near10 filter) and (notch with "band pass") adj filter) and notch adj filter) and (@rlad<=20010822 or @ad<=20010822)) and (audio sound transducer speaker)) and 381/\$.ccls.	US-PGPUB	
548	"band reject filter"	USPAT; US-PGPUB	2003/05/04 01:27
217	"band reject filter" and (sound audio transducer speaker)	USPAT; US-PGPUB	2003/05/04 01:30
214	381/\$.ccls. and (notch "band reject") adj filter	USPAT;	2003/05/04 01:44
105	(381/\$.ccls. and (notch "band reject") adj filter ) and (resistor capacitor inductor)	USPAT;	2003/05/04 01:59
<b>ა</b>	204/\$ ook ond (hotek "bond reject") od filter como ooi	US-PGPUB	2002/05/04 04
	or me. ocis. and (those in bank reject ) adjinter) same com	US-PGPUB	10000000
17412	coil same filter	USPAT;	2003/05/04 01:59
814	Coil same filter same mannet	US-PGPUB	
	2289 2289 753 508 500 293 293 293 293 293 293 293 293 293 293	(((abth and "band pass") and notch with "band pass") and filter) and (notch with "band pass") (((notch and "band pass") and notch with "band pass") and filter) and (notch with "band pass") and notch with "band pass") and filter) and (notch with "band pass") and sear 10 filter) and (notch with "ba	(381%,ccls. and midrange and (tweeter woofer) and notch and filter (381%,ccls. and midrange and (tweeter woofer)) and notch and notch adj filter (381%,ccls. and midrange and (tweeter woofer)) and notch notch and "band pass" (notch and "band pass") and notch with "band pass" (notch and "band pass") and notch with "band pass") and filter ((notch and "band pass") and notch with "band pass") and filter) and (notch with "band pass") and filter) and notch adj filter) and (pats with "band pass") and filter) and notch adj filter) and (pats with "band pass") and filter) and (notch with "band pass") and filter) and (notch with "band pass") and filter) an

2003/04/27 22:49	EPO; JPO; DERWENT	((381/396,398,400,401,402,403) or (455/90,567)).CCLS.	551	•
2003/04/27 23:09	USPAT;	(((381/396,398,400,401,402,403) or (455/90,567)).CCLS.) and (filter notch tactile resistor	634	•
2003/05/03 19:40	USPAT;	((381/396,398,400,401,402,403) or (455/90,567)).CCLS.	2713	•
2003/05/04 02:58	US-PGPUB	((speaker actuator transducer) same coil and (notch "band reject") adj2 filter) not ((speaker and coil same(notch "band reject") adj2 filter) ((transducer and coil same(notch "band reject") adj2 filter) ((transducer and coil same(notch "band reject") adj2 filter) (coil same(notch "band reject") adj2 filter) ((coil same(notch "band reject") adj2 filter) not ((speaker and coil same(notch "band reject") adj2 filter) not ((speaker and coil same(notch "band reject") adj2 filter) ((transducer and coil same(notch "band reject") adj2 filter) not (speaker and coil same(notch "band reject") adj2 filter)	234	-1 -1 -1
2003/05/04 02:44	USPAT; US-PGPUB	(speaker actuator transducer) same coil and (notch "band reject") adj2 filter	300	112
2003/05/04 02:38	USPAT; US-PGPUB	(coil same(notch "band reject") adj2 filter ) not ((speaker and coil same(notch "band reject") adj2 filter ) (transducer and coil same(notch "band reject") adj2 filter ) ((transducer and coil same(notch "band reject") adj2 filter ) not (speaker and	129	109
2003/05/04 02:42	USPAT;	coil same(notch "band reject") adj2 filter	189	106
2003/05/04 02:36	USPAT;	(transducer and coil same(notch "band reject") adj2 filter ) not (speaker and coil same(notch "band reject") adj2 filter )	. 40	103
2003/05/04 02:36	USPAT;	transducer and coil same(notch "band reject") adj2 filter	46	100
2003/05/04 02:37	USPAT;	speaker and coil same(notch "band reject") adj2 filter	20	97
2003/05/04 02:28	USPAT;	((((coil same resistor and (capacitor or inductor)) and resistor with (capacitor or inductor)) and	162	. 94
2003/05/04 02:11	USPAT;	speaker same coil) not digital ((((coil same resistor and (capacitor or inductor)) and resistor with (capacitor or inductor)) and speaker same coil) not digital) and frequency	284	91
2003/05/04 02:11	USPAT;	(((coil same resistor and (capacitor or inductor)) and resistor with (capacitor or inductor)) and	336	88
2003/05/04 02:09	USPAT;	((coil same resistor and (capacitor or inductor)) and resistor with (capacitor or inductor)) and	460	85
2003/05/04 02:09	USPAT; US-PGPUB	(coil same resistor and (capacitor or inductor)) and resistor with (capacitor or inductor)	18619	82
2003/05/04 02:10	USPAT; US-PGPUB	((coil same resistor and (capacitor or inductor)) and speaker same coil) not digital	398	79
2003/05/04 02:09	USPAT; US-PGPUB	(coil same resistor and (capacitor or inductor)) and speaker same coil	541	76
2003/05/04 02:05	USPAT; US-PGPUB	coil same resistor and (capacitor or inductor)	22240	73
2003/05/04 02:04	USPAT; US-PGPUB	((coil same filter same magnet) and filter same resistor and (capacitor or inductor)) and 381/\$.ccls.	O	70
2003/05/04 02:01	USPAT; US-PGPUB	(coil same filter same magnet) and filter same resistor and (capacitor or inductor)	116	67

USPAT; 2003/04/28 00:10	"4300022"	8	•
Ğ.	4302 103	5	•
B	",,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u> </u>	1
USPAT; 2003/04/28 00:10	"4582163"	10	•
") adj2 USPAT; 2003/04/28 00:09	\$4speaker same ((notch bandpass "band pass" lowpass "low pass" highpass "high pass") adj2	150	•
EPO; JPO;			
USPAT; 2003/04/27 23:50	(("5829319") or ("6211775") or ("9849460")).PN.	11	•
) adj2   USPAT;   2003/04/27 23:49   US-PGPUB	\$4speaker and ((notch bandpass "band pass" lowpass "low pass" highpass "high pass") adj2 filter) and coil	1729	•
USPAT; 2003/04/27 23:46	(455/\$.ccls. and (((notch_bandpass "band pass") adj1 filter) same coil)) and \$4speaker	35	•
US-PGPUB 2003/04/27 23:46	340/\$.ccls. and (((notch_bandpass "band pass") adj1 filter) same coil) and \$4speaker	33	•
Ě		151	•
US-PGPUB	340/\$.ccls. and ((("low pass" lowpass) and ("high pass" and highpass)) same coil) and \$4speaker		1
US-PGPUB	455/\$.ccls. and ((("low pass" lowpass) and ("high pass" and highpass)) same coil) and \$4speaker	. 0	•
US-PGPUB	381/\$.cc/s. and (((notch_bandpass "band pass") adj1 filter) same coil)	38	•
Ĕ	381/\$.ccls. and ((("low pass" lowpass) and ("high pass" and highpass)) same coil)		•
USPAT; 2003/04/27 23:40	381/\$.ccls. and ((notch_bandpass "band pass") same coil)	101	•
ÜB	(samsung.asn. and \$4speaker) and co⊪	59	•
Ĕ	samsung.asn. and \$4speaker	200	•
Ğ	"646682"	F 20 1	•
US-PGPUB	(455/90,567)). CCLS.) and (filter notch tactile resistor inductor capacitor)) and (notch bandpass))		
	5/90,567)).CCLS.) and (filter notc	30	•
or USPAT; 2003/04/27 23:23	((((381/396,398,400,401,402,403) or (455/90,567)).CCLS.) and (filter notch tactile resistor inductor capacitor)) and (band adi pass)	39	•
or USPAT; 2003/04/27 23:23	((((381/396,398,400,401,402,403) or (455/90,567)). CCLS.) and (filter notch tactile resistor inductor capacitor)) and (notch bandpass)	156	•
US-PGPUB	((((381/396,398,400,401,402,403) or (455/90,567)).CCLS.) and (filter notch tactile resistor inductor capacitor)) and (notch adj3 filter)	ν.	•
US-PGPUB	((((381/396,398,400,401,402,403) or (455/90,567)).CCLS.) and (filter notch tactile resistor inductor capacitor)) and notch	724	•
DERWENT	inductor capacitor)		
	,403) or (455/90,567)).CCLS.) and (filter notch tactile resistor	(((381/396,398,400,401,402	29 (((381/396,398,400,401,402

•	•	•	•	•	•	•	•	•	•	•	•	•	1			•			٠,	•				•	· - <u></u>		•	•			-	
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œ		, N	0	6	0	N	0	0	0	0	0	20	w w		7	<u>,</u>			4	c	<b>5</b>		4	ω			<b>ω</b>	ω				
("3997724" "4675907" "5436622" "5524061" "5528697" "5894263" "5956622"		211775").PN.	6466682.URPN.	511132" "5528697" "5894263" "6208237" "6211775").PN.		373956").PN.						373956").PN.		or ("4504704") or ("6553125") or ("6211775") or ("20020177419") or ("646682") or ("6487300") or ("6373958") or ("5861686") or ("4520237") or ("4300022") or ("20030036364") or ("20020061115") or ("20020064295") or ("20020076068")	("20020114486") or ("2007747") or ("2007748") or ("2007750") or ("2007749") or ("3838216")	(("20020122560") or ("20030044040") or ("20030059079")).PN.) and filter	or ("63/3958") or ("5861686") or ("4520237") or ("4300022") or ("20030036364") or ("20020051557") or ("20020061115") or ("20020064295") or ("20020076068") or	("6487300")	((("4582163") or ("4300022") or ("5511132") or ("4504704") or ("2007750") or ("20030044031") L		( 20030044040 ) or ( 20030059079 )).PN.) and Vibrating coll .cim.	or ( 4304704 ) or ( 6333123 ) or ( 6217773 ) or ( 20020177419 ) or ( 6466682 ) or ( 6487300 ) or ("6373958") or ("5861686") or ("4520237") or ("4300022") or ("20030036364") or ("20020061115") or ("20020064295") or ("20020076068") or ("20020076076") or ("20020076") or ("200	7749") or ("3838216")	il".clm.	or ("5373958") or ("5861686") or ("4520237") or ("4500022") or ("20030036364") or ("20020051557") or ("20020061115") or ("20020064295") or ("20020076068") or	("6487300")	((("4582163") or ("4300022") or ("5511132") or ("4504704") or ("2007750") or ("20030044031")   or ("20020114486") or ("2007747") or ("2007748") or ("2007750") or ("2007749") or ("3838216")   L		("20020051557") or ("20020061115") or ("20020064295") or ("20020076068") or ("20020122560") or ("20030044040") or ("20030059079")).PN.		32") or ("6487300") or	
USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	USPAT	CDAT		US-PGPUB	IISPAT.		0	USPAT;	US-PGPUB	SBAT.		US-PGPUB	USPAT:			USPAT; US-PGPUB	USPAT		DERWENT	EPO; JPO;	
2003/04/28 00:36	2003/04/28 00:36	2003/04/28 00:36	2003/04/28 00:36	2003/04/28 00:35	2003/04/28 00:35	2003/04/28 00:35	2003/04/28 00:35	2003/04/28 00:35	2003/04/28 00:35	2003/04/28 00:35	2003/04/28 00:35	2003/04/28 00:34	2003/04/28 00.3		10000	2003/04/28 00:30			2003/04/28 00:29	2003/04/28 00:29	2002/04/29 00:2			2003/04/28 00:30	•		2003/04/28 00:22	2003/04/28 00:19				

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2003/04/30 21:51	DERWENT;	200149519	N	'
	IBM_TDB		<b>.</b>	
2003/04/30 21:50	EPO; JPO;	"149519"	<b>O</b> 1 (	•
2003/04/20 24.50	DERWENT	"140549"	ה 	•
2003/04/30 21:50	EPO; JPO;	"149519"	ڻ.	1
2003/04/30 21:50	EPO; JPO;	"200149519"	2	•
2003/04/30 21:49	DERWENT	"49519"	4	•
2003/04/30 21:48	DERWENT	71334	. «	•
2003/04/30 21:48	DERWENT	(("0049519") or ("0071334")).PN.	o c	•
2003/04/30 21:48	US-PGPUB	(("4250637") or ("5172092") or ("5293161") or ("5528697") or ("5630206") or ("5722074") or ("5894263") or ("5936516")).PN.	- α	•
2003/04/30 21:46	DERWENT	9849460		•
	US-PGPUB		<b>,</b>	
2003/04/30 21:45	US-PGPUB	(((speaker and notch) and (notch same coil)) and (notch with coil)) and diaphragm	13	•
2003/04/30 20:31	USPAT;	((speaker and notch) and (notch same coil)) and (notch with coil)	56	•
2003/04/30 20:31	US-PGPUB	(speaker and notch) and (notch same coil)	116	•
	US-PGPUB		<u>.</u>	•
2003/04/30 20:31	USPAT;	speaker and notch	2585	•
2003/04/28 00:41	USPAT	20020122560.URPN.	0 1	•
2003/04/28 00:41	USPAT	2007750 LRPN	4 0	• •
2003/04/28 00:40	USPAT	2007748.URPN.	<b>ດ</b>	•
2003/04/28 00:40	USPAT	2007749.URPN.	2	•
2003/04/28 00:40	USPAT	2007750.URPN.	2	•
2003/04/28 00:39	USPAT	3030210.URFN. ("2007746"   "2007748"   "2318517"   "2727949"   "2832828") PN	ъ <b>Б</b>	• •
2003/04/28 00:39	USPAT	("1822758" "1969657" "2194175" "2860183" "2925541" "3196211" "3542952").PN.	7	٠
2003/04/28 00:39	USPAT		6	•
2003/04/28 00:38	USPAT	("2007746" "2007748" "2007749" "3055991" "3838216" "4201886" "4335274").PN	7	•
2003/04/28 00:38	USPAT	("3133162" "3138864" "3430007" "3453400" "4143537" "4158756" "4376233").PN. 4504704 HRPN	<u>,</u>	• •
2003/04/28 00:38	USPAT		. 9	•
2003/04/28 00:37	USPAT	("1917309" "2007750" "2866515" "3930130" "4190746" "4359132").PN.	6	1
2003/04/28 00:37	USPAT	4582163.URPN.	9	•
2003/04/28 00:37	LISBAT	("3629524"   "3946342"   "5425032") PN	<b>μ</b> τ	• •
	- - - - - - -	"5747906").PN.	<b>_</b>	
2003/04/28 00:36	USPAT	("4240002"   "4391532"   "5172092"   "5467323"   "5517574"   "5546069"   "5682132"	8	•

2003/05/03 20:39	USPAT; US-PGPUB	(381/182,184,402).ccls. and midrange and tweeter	34	•	
2003/05/03 20:36	USPAT; US-PGPUB	((((381/\$.ccls. and midrange and (tweeter woofer)) and midrange and tweeter) and filter) and (notch bandpass "band pass" passband "pass band") and ( notch bandpass "band pass" passband "pass band") same midrange)	20	•	
2003/05/03 20:14	USPAT; US-PGPUB	(((381/\$.ccls. and midrange and (tweeter woofer)) and midrange and tweeter) and filter) and (notch bandpass "band pass" passband "pass band")	34	•	
2003/05/03 20:01	USPAT; US-PGPUB	((381/\$.ccls. and midrange and (tweeter woofer)) and midrange and tweeter) and filter	96	•	
2003/05/03 20:01	USPAT; US-PGPUB	(381/\$.ccls. and midrange and (tweeter woofer)) and 381/\$.ccls. and midrange and tweeter	200	•	
2003/05/03 23:59	USPAT; US-PGPUB	381/\$.ccls. and midrange and (tweeter woofer)	225	•	
2003/05/03 20:00	USPAT;	381/\$.ccls. and coil\$1 and notch adj filter\$1	33	•	_
2003/05/03 19:48	USPAT;	voice adj coil\$1 same notch adj filter\$1	16	•	
2003/05/03 19:54	USPAT;	381/\$.ccls. and coil\$1 same notch adj filter\$1	ω	•	
2003/05/03 19:45	USPAT;	381/\$.ccls. and coil\$1 with notch adj filter\$1	N	•	
2003/04/30 22:02	EPO; JPO;	(samsung.asn. and coil) and diaphragm	19	•	
2003/04/30 22:02	EPO; JPO;	samsung.asn. and coil	1255	•	
2003/04/30 22:02	EPO; JPO; DERWENT	samsung.asn.	107402	•	
2003/04/30 22:01	EPO; JPO;	"68976"	&	•	
2003/04/30 22:01	DERWENT;	( 0000970 ).FN.		•	
2003/04/30 22:00	USPAT; US-PGPUB	100680.76T		. •	
	DERWENT;		<u> </u>		
2003/04/30 21:52	IBM_TDB EPO; JPO;	"98-22659"	0	•	_
2003/04/30 21:52	IBM_TDB EPO; JPO; DERWENT;	"98-22244"	0	•	
2003/04/30 21:52	EPO; JPO; DERWENT;	"1998-22244"	0	•	
2003/04/30 22:00	EPO; JPO; DERWENT;	"199822244"	0	•	
2003/04/30 21:51	EPO; JPO; DERWENT;	"22244"	6	•	

	US-PGPUB			
2003/05/03 22:02	USPAT;	("4783824").PN.	_	•
	US-PGPUB			
2003/05/03 21:52	USPAT;	(("4074070") or ("4180706") or ("6542617") or ("6373958") or ("6259799") or ("2727949")).PN.	6	•
	US-PGPUB			
2003/05/03 21:51	USPAT;	45 381/402	45	•
	US-PGPUB			
2003/05/03 21:30	USPAT;	200   (381/\$.ccls. and midrange and (tweeter woofer)) and midrange and tweeter	200	•
	US-PGPUB			_
2003/05/03 21:28	USPAT;	24   (381/186).ccls. and midrange and tweeter	24	•